

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the matter of     )  
                  ) GN Docket No. 09-51  
a National Broadband Plan    )

## SECOND ERRATUM, SUPPLEMENTAL COMMENTS/REPLY COMMENTS, ADDENDA

To the Commission:

COMES NOW the undersigned, JAMES EDWIN WHEDBEE, a Commenter in the above-captioned proceeding now pending before the Commission, supplementing, correcting, and supplying addenda evidence in support of his previously submitted comments and reply comments by adding the following independent article in support thereof ("Reclaiming Spectrum: A Solution in Search of a Problem," by: Adam Lynn, July 9, 2010 ? [freepress.net](http://freepress.net)).

July 9, 2010

Posted by Adam Lynn

Last week, President Obama put out a memorandum on spectrum reclamation, placing further momentum behind the push to free up more spectrum for mobile high-speed Internet use. Sound familiar?

The announcement followed the release of a long-overdue paper by the FCC, meant to be the analytical underpinnings of the National Broadband Plan's recommendation to increase the amount of spectrum available for broadband. The President's memorandum relied heavily on data from the FCC's spectrum analysis paper.

There's a lot of inertia building around these ideas ? perhaps a little too much. Guiding spectrum policy to serve the public interest going forward requires all the participants to take a step back, to examine the scope and nature of the need for more spectrum, and ? most importantly ? to figure out what the best uses of newly available spectrum would be.

The typical excuse is that we need more spectrum to avoid a "spectrum crunch" (or with even more drama, "spectrum crisis") because the popularity of smartphones is increasing and mobile data consumption is skyrocketing. We're not so sure about this, for several reasons. As we've said before, a lot of current consumer problems in wireless are best attributed to problems with effective competition in the mobile broadband market ? in other words, we don't (yet) have a spectrum crisis; we have an "AT&T's Network Sucks" crisis. But looking just at spectrum usage and the supposed limitations, frankly, hard numbers haven't yet been presented. There is a long bridge to cross from

the noticing the popularity of iPhones and Droids to asserting that we have a spectrum crisis. The National Broadband Plan doesn't move the argument across this bridge. If you're willing to scroll all the way to page 76 of the FCC's spectrum analysis, you'll see that the agency points to the predicted increases in future traffic from three entities as evidence of the impending spectrum crisis. The FCC highlights the forecasts of Cisco. You heard it right, Cisco, the same company that sells equipment to wireless operators when they put spectrum to use. The FCC notes "by 2014, Cisco projects wireless networks in North America will carry some 740 petabytes per month, a greater than 40-fold increase." If these predictions were accurate, it's conceivable that we could really find ourselves in a spectrum crunch, sooner than we might expect.

The problem is Cisco has been making these predictions for numerous years. In fact, it predicted in 2008 that North American wireless networks would be transmitted a total of 48 petabytes in 2009 and 105 petabytes in 2010. But in its latest report, Cisco instead put forth a prediction of 47 petabytes by 2010 and listed 2009 as transmitting 17 petabytes. In other words, in 2008, its prediction for the very next year missed by a factor of 3, and it pushed back the same hyper-inflated projection by another year. Surely, 2010 will be the year we transmit nearly 50 petabytes! And if not 2010, then we definitely will in 2011! We promise!

Outside of questionable and potentially self-serving traffic predictions, the FCC bases its report in part on wireless carrier's assertions that they need more spectrum. Regardless of any actual contextual factors, additional spectrum would allow the wireless industry to generate more revenue. So asking the wireless industry whether it needs more spectrum, on some level, is like asking a child whether she needs a bigger birthday cake.

The real question the FCC needs to ask is, who needs more spectrum, and why? now that we have an idea that we can make more spectrum available, and that we probably should, how should it be allocated? Is the current commercial wireless industry the most valuable user of newly available spectrum?

Consider this: The wireless industry currently holds roughly 500 megahertz of spectrum, but large portions of that are not yet in use. Although the White House fears a "spectrum crunch" as the demand for mobile data usage increases, before even more valuable spectrum is handed over to carriers, they must be held accountable for "warehousing" valuable spectrum. It is in the interest of the largest carriers to hoard spectrum and to keep it from new entrants and competitors? just as a child might take an extra large piece of birthday cake, because she can, and then find herself unable to eat it all.

The wireless industry has offered plenty of rhetoric and hand-waving on their "need" for vastly more spectrum, but they've provided few hard facts about what amount of spectrum will be necessary in the future, and how they justify such a need. So to establish a need for more spectrum, the FCC has little to rely on to make its determinations and estimates, other than assertions such as Verizon saying we "might acquire more than 100 MHz within the next five years, if it were available." (Interpretation: Verizon would be willing to warehouse spectrum to ensure it does not become available to competitors).

The wireless market is increasingly looking like a duopoly with AT&T and Verizon continuing to gain marketshare. There is no evidence that either company is facing, or will face, a mobile data crunch due to a lack of spectrum ? and plenty of evidence that they will skimp on network investment and cell site installations if they have more spectrum, leading to a far less efficient overall network. The largest spectrum holders (Verizon Wireless, AT&T and Clearwire) already have more than enough capacity for 4G networks and are not afraid to tout that fact. So the coming rise of 4G networks can?t be a reason in itself why more spectrum will be necessary ? unless all of the spectrum will go to other carriers, through spectrum caps that limit the eligibility of Verizon Wireless, AT&T and Clearwire to participate in any future auctions. But if the FCC intends to free up spectrum with the end goal of ensuring the iPhone 7 can operate seamlessly on AT&T?s network regardless of AT&T?s decreasing capital expenditures, the agency would serve the public interest by turning its attention to pressing items.

However, if the FCC plans to utilize this new spectrum to foster competition and innovation then we?re playing a different ballgame. The current spectrum reallocation project offers the FCC perhaps its last chance to get right what its gotten wrong so many times before ? because if 500 MHz really can be freed up for mobile broadband, that will probably represent a larger chunk than we can hope to see for several decades (perhaps an order of magnitude larger).

The FCC must ensure that new spectrum goes to smaller players or new entrants, to level the playing field ? although this hasn?t been the FCC?s strong suit in the past. The FCC should also dedicate a healthy portion of this spectrum to innovative unlicensed uses, which have offered amazing benefits at far less cost than licensed uses.

The FCC has an obligation to manage the public?s spectrum for the benefit of the public. Pushing broadcasters and government users to the side to hand valuable spectrum over to AT&T and Verizon won?t cut it.

WHEREFORE, in addition to his prior comments and reply comments, the foregoing considered, the undersigned Commenter strongly advises the Commission to adopt an alternative to the spectrum reallocations currently being considered in these proceedings by reallocation of SHF instead of UHF spectrum.

Respectfully submitted:     /s./ JAMES EDWIN WHEDBEE,  
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COMMENTER